HD

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,293	02/13/2004	Kurt Mohr	1-25074	7430

46582 7590 04/04/2007

MACMILLAN, SOBANSKI & TODD, LLC
ONE MARITIME PLAZA - FOURTH FLOOR
720 WATER STREET
TOLEDO, OH 43604

EXAMINER	
NGUYEN, XUAN LAN T	
ART UNIT	**PAPER NUMBER**
3683	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/779,293	MOHR, KURT	
	Examiner	Art Unit	
	Lan Nguyen	3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 February 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) *3,9-11 and 13* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-8,12,14, 15 and 16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 4-8, 12, 14, 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Iwamoto (USP 4,716,994).

Re: claim 1, Iwamoto shows a disc brake, as in the present invention, comprising: a caliper 2, two brake shoes 6, 7 which are pressable against both sides of a brake disc 1 and which in relation to a peripheral force generated upon application of the brake shoes against the brake disc, are supported against a vehicle-fixed carrier 11, wherein the peripheral force in dependence upon a direction of rotation of the brake disc acts in one of two opposite peripheral force directions, as shown in figure 1; at least one device 13, 13 for at least one of measuring and converting the peripheral force, the device being disposed in a force transmission chain between at least one of the brake shoes 6 and the carrier 11; and at least one force transmission member 8, which is disposed between at least one of the brake shoes 6 and the device 13 for at least one of measuring and converting the peripheral force, and which is movable relative to the carrier 11, as shown in figure 1, under guidance in a plane parallel to the brake disc such that a transverse force introduced into the force transmission member by the brake

shoe is substantially not transmitted to the device for at least one of measuring and converting the peripheral force, wherein the at least one force transmission member 8 is disposed at one side relative to the caliper in order to take up and transmit the generated peripheral force in only one of the two peripheral force directions as shown in figure 1.

Re: claim 2, figure 2 further shows guide 10 being rigidly coupled to the carrier 11.

Re: claim 4, figure 1 shows the force transmission member 8 is guided in a rotary manner.

Re: claim 5, as shown in figure 1, the force transmission member 8 is a swivel element, which has a swiveling axis, parallel to an axis of rotation of the disc 1.

Re: claim 6, figure 1 shows the swivel element 8 being coupled to the carrier by bolt 10.

Re: claims 7 and 8, figure 1 further shows two force transmission members 8a,8c on the right and 8c, 8c on the left and two devices 13, 13 disposed at each side of the brake disc 1.

Re: claim 12, column 4, line 3 shows that the device 13 is a force sensor.

Re: claim 14, figure 1 shows the force transmission member 8a, 8c being profiled at a region interacting with the brake shoe 6 and wherein the at least one brake shoe has a complementary profiling to complement member 8a, 8c.

Re: claim 15, Iwamoto shows a vehicle brake system having a disc brake, as in the present invention, comprising: a caliper 2, two brake shoes 6, 7, which are

pressable against both sides of a brake disc 1 and which in relation to a peripheral force generated upon application of the brake shoes against the brake disc, are supported against a vehicle-fixed carrier 11, wherein the peripheral force in dependence upon a direction of rotation of the brake disc acts in one of two opposite peripheral force directions, as shown in figure 1; at least one device 13 for at least one of measuring and converting the peripheral force, the device being disposed in a force transmission chain between at least one of the brake shoes 6 and the carrier 11 as shown in figure 1; and at least one force transmission member 8, which is disposed between at least one of the brake shoes 6 and the device 13 for at least one of measuring and converting the peripheral force and which is movable relative to the carrier 11 under guidance in a plane parallel to the brake disc such that a transverse force introduced into the force transmission member by the brake shoe is substantially not transmitted to the device for at least one of measuring and converting the peripheral force, wherein the at least one force transmission member 8 is disposed at one side relative to the caliper in order to take up and transmit the generated peripheral force in only one of the two peripheral force directions, as shown in figure 1.

Re: claim 16, Iwamoto shows a disc brake, as in the present invention, comprising: a brake carrier 11 adapted to be rigidly fixed to a vehicle: a caliper 2 which is carried by the brake carrier and overlaps a brake disc 1, as shown in figure 2, for introducing a braking force into the brake disc; two brake shoes 6 and 7, which are pressable via the caliper against both sides of the brake disc and which in relation to a peripheral force generated upon application of the brake shoes against the brake disc

are supported against upstanding parts of the brake carrier adjacent the brake shoes, as shown in figure 2, carrier 11 is shown to be upstanding and carrier 11 is adjacent to the brake shoes 6, 7, wherein the peripheral force in dependence upon a direction of rotation of the brake disc acts in one of two opposite peripheral force directions; at least one device 13 for at least one of measuring and converting the peripheral force, the device being disposed in a force transmission chain between at least one of the brake shoes 6, 7 and the brake carrier 11 as shown in figure 1; and at least one force transmission member 8, which is disposed between at least one of the brake shoes 6, 7 and the device 13, as shown in figure 1, for at least one of measuring and converting the peripheral force and which is movable relative to the brake carrier under guidance in a plane parallel to the brake disc such that a transverse force introduced into the force transmission member by the brake shoe is substantially not transmitted to the device for at least one of measuring and converting the peripheral force, wherein the at least one force transmission member 8 is disposed at one side relative to the caliper in order to take up and transmit the generated peripheral force in only one of the two peripheral force directions.

Response to Arguments

3. Applicant's arguments filed 2/8/07 have been fully considered but they are not persuasive.

Applicant arguments are more specific than the claim language. Applicant argues that Iwamoto's brake does not meet the claimed feature of the at least one force

transmission member to be disposed *at one side* and to take up and transmit in only *one to the two peripheral force directions*. The Examiner maintains that Iwamoto's brake meets the cited claimed feature in that the right side of element 8 is considered to be the at least one force transmission member to be disposed *at one side (the right side)* and to take up and transmit in only *one to the two peripheral force directions (the right side force)*. The right side of element 8 of Iwamoto is not located on the left and cannot transmit the force on the left. Nowhere in the claims that require the force transmission member to be two separate independent elements that are not contacting each other. Iwamoto's element 8 may be a one-piece element but it has two members, a right and a left, that each member is performing the task of transmitting the force only on one direction in the same manner as Applicant's force transmission member.

For these reasons, the rejection is still deemed proper and is repeated above.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Nguyen whose telephone number is (571) 272-7121. The examiner can normally be reached on Monday through Friday, 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Xuan Lan Nguyen/ 3-29-07
Primary Examiner
Art Unit 3683